

## ABSTRACT

### Breathing Gas Supply System

A breathing gas supply system (10) for supplying breathable gas in an aircraft includes an oxygen enriching apparatus (12) which is operable in at least two modes to provide product gas with varying oxygen concentrations, a first feed line (22) to feed more highly enriched product gas to one or more breathing gas outlets (17), and a second feed line (24) to feed less highly enriched product gas e.g. to an aircraft cabin (11) for breathing during normal high altitude flight, and a control means (30) to control the oxygen enrichment apparatus (12) to provide highly enriched product gas to the breathing gas outlet or outlets (17) in the first mode of operation or less highly enriched product gas e.g. to the cabin (11) for normal breathing, and to control a diverter valve (20) which directs the product gas to the respective feed line (22, 24).